### A New Species of Pulverro from California

(Hymenoptera: Sphecidae)

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The genus *Pulverro* was proposed by V. S. L. Pate in 1937 to include a discrete group of Pemphredonine wasps that are restricted in their distribution to western North America. The genus is characterized by the mesonotum which extends forward to overhang the pronotum, and the venation of the forewing which shows a stump or spur on the transverse cubital vein. These two characteristics serve particularly to separate the genus *Pulverro* from its two most closely related genera, *Ammoplanus* Giraud and *Ammoplanops* Gussakovskij. Pate described the genus on the basis of a new species, *P. mescalero* from the southwestern United States and the species *P. columbianus* from British Columbia, which had been described by Kohl and placed by him in the genus *Ammoplanus*. Pate described four other species for the genus from a very few specimens of only one sex in each case.

Specimens of the species presently being described were first collected by the author in the late summer of 1965 in the Marble Mountains Wilderness Area in Siskiyou County, California. Seven specimens were taken, six females and one male. The following summer four specimens were taken, two females and two males in an adjacent area of the Marble Mountains. In 1967 in the Salmon-Trinity Alps area just south of the Marble Mountains 95 specimens were taken, 70 females and 25 males. Most of these were taken at one restricted locality near the edge of an open meadow at 7000' elevation. Males and females were taken with the same sweep of the net from the blossoms of Heracleum in full sunlight during the late afternoon. No evidence of nesting was found. Only a few scattered specimens were taken in adjacent areas within ten miles of the major collecting site.

This new species appears to be closely related to *P. columbianus*, but differs from it in the male in the size and shape of the clypeal spine which is greatly abbreviated, more texturing on the clypeal disk,

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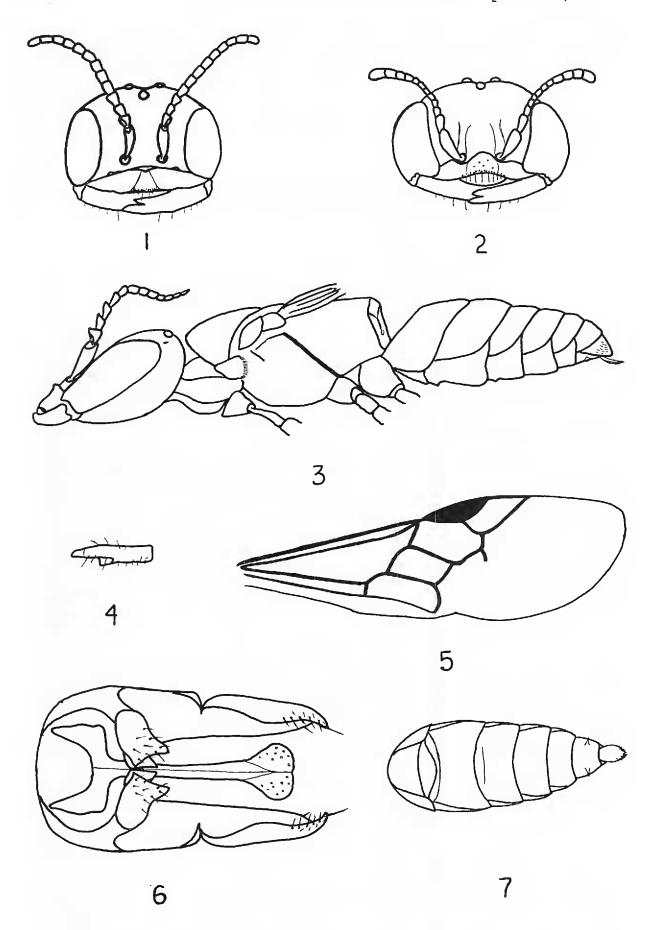


Fig. 1. Front view of head of male holotype. Fig. 2. Front view of head of female. Fig. 3. Lateral view of male holotype. Fig. 4. Ventral view of mandible of male holotype. Fig. 5. Forewing of male holotype. Fig. 6. Ventral view of genitalia of male paratype. Fig. 7. Ventral view of abdomen of male holotype.

larger supraorbital foveae, darker antennae and a larger ventral tooth on the mandibles. Both Kohl and Pate refer to the female of P. columbianus as having a clypeal spine but the female of the new species has no evidence of a clypeal spine.

Holotype of the new species deposited in the California Academy of Sciences. Paratypes will be distributed to the University of California at Davis, the U. S. National Museum and the Academy of Natural Sciences at Philadelphia.

### Pulverro monticola Eighme, new species

MALE HOLOTYPE.—Length 3.5 mm. Color, black with golden brown front tibia and tarsi, apex of front and middle femora, base of middle and hind tibia, apex of middle tibia; midtarsi and hind tarsi reddish brown except mid basitarsus golden brown; mandible ivory with reddish tip; terminal segments of palp ivory, basal segments reddish brown. Mandible bidentate, bearing small translucent tooth on ventral margin. Clypeus with dorsal margin not sinuate, narrowed to a point laterally, with raised triangular medial portion less densely clothed with pubescence, tessellate in texture, with ventral border depressed, dorsal apex bearing low rounded prominence with sharp declivity from apex of triangular area to frontoclypeal suture. Tentorial fovea prominent. Face above frontoclypeal suture clothed with silver flattened pubescence that becomes narrower and sparser toward vertex. Texture of head granular to minutely rugulose. Antenna black, with reddish brown on apical margin of scape and apical points of segments 3-5. Second segment of antenna triangular, last four segments somewhat flattened, terminal segment spatulate. Supraorbital fovea minute, oblong, near apex of eye, distance from eye margin about equal to length of fovea.

Thorax shining, finely punctate. Mesonotum thrust forward over pronotum with anterolateral angles produced to form squarish appearance from above. Suture between mesonotum and metanotum depressed and foveolate. Propodeum strongly rugose, posterior face flattened and vertical with prominent central fovea.

Abdomen shining, minutely rugulose with posterior portions of each tergite granulate and bearing a fringe of fine pubescence. Seventh tergite spiny at apex. Second sternite with transverse arcuate groove anteriorly. Third sternite with indistinct straight transverse groove. Sixth sternite with sharp fold laterally forming an angle bearing small carina in mid-lateral area, truncate posteriorly with shiny, slightly arcuate margin. Last sternite spatulate with long fine pubescence and margined posteriorly with eleven pointed teeth.

Female.—Similar to male except as follows: clypeus with dorsal margin sinuate, bordering antennal socket for one-half its circumference. Central area of clypeus smooth and shining, roundly tumid with no abrupt declivity on dorsal margin. Ventral border slightly arcuate in medial portion, bearing long, slender setae. Tumid ridge extending dorsally from antennal socket forming medial depression. Tentorial fovea obscure. Texture of head finely impunctate. Antenna golden brown beneath, black above, terete. Mandible without ventral tooth. Supraorbital fovea linear, as long as diameter of lateral ocellus and extending to margin of eye. Pygidium elongate trigonal, straight, strongly margined laterally, apex narrowly rounded, shining surface with few scattered punctures and some granulation in apical area. Last abdominal sternite plain, with no lateral carinae.

Holotype male, Bear Basin 7000 feet, Siskiyou County, California, 9 August 1967 (L. Eighme) (CAS). Paratypes, 24 males, 70 females, same data as holotype; 6 females, 1 male, Ukonom Lake 6200 feet, Siskiyou County, California, 10 August 1965 (L. Eighme); 2 males, 2 females, Marble Valley 6000 feet, Siskiyou County, California, 10 August 1966 (L. Eighme).

#### LITERATURE CITED

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### New Species and Records of Cimicidae with Keys (Hemiptera)

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Since the monograph of Cimicidae (Usinger, 1966) was published, the following species have been discovered, mainly in Southeast Asia. Also new records are at hand for several species, a new genus has been discovered from Africa (Usinger and Carayon, 1967) and 2 new species have been added to the genus *Paracimex* (Ueshima, 1968). The new totals for the Cimicidae are 23 genera and 83 species. Details as to biology, cytology and experimental hybridizations of these new species will be published later.

The types, unless otherwise stated in the description, will be deposited in the U. S. National Museum.

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# Cimex insuetus Ueshima, new species (Fig. 1)

Female.—Head 0.7 mm wide; slightly longer than wide, 30:28; interocular space 5 times as wide as eye, 20:4. Antennae 1.9 mm long; proportion of The Pan-Pacific Entomologist 44: 264-279. October 1968